## *ADDITIONAL INFORMATION*

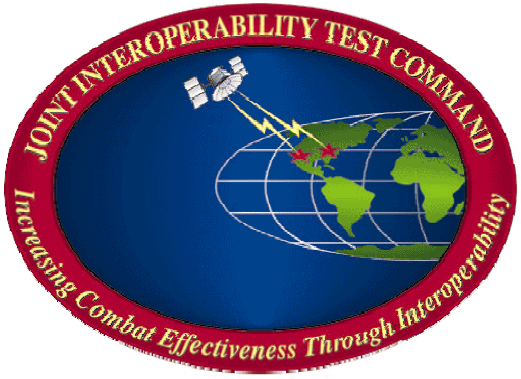
To obtain more information about the JITC RFTF or their support to the JTRS Program, contact the following JITC representatives:

### JITC RFTF

***Networks and Transport Division***
***DSN 879-5085***
***(520) 538-5085***

Defense Information Systems Agency
Department of Defense

# *RADIO FREQUENCY TEST FACILITY (RFTF)*




### Joint Interoperability Test Command

Attn: Visitor Support Center
P.O. BOX 12798
Fort Huachuca, AZ 85670-2798

Phone: 1-800-LET-JITC
http://jitc.fhu.disa.mil

*Increasing Combat Effectiveness*
*Through Interoperability*

# Joint Interoperability Test Command

Revised July 2006

## GENERAL RFTF INFORMATION

The Joint Interoperability Test Command (JITC) Radio Frequency Test Facility (RFTF) performs standards conformance testing and radio interoperability (IOP) testing and certification across three labs located at Fort Huachuca, Arizona. The High Frequency Test Facility (HFTF), the Ultra High Frequency (UHF) Satellite Communications (SATCOM) test facility, and the Very High Frequency (VHF)/UHF test facility. The JITC provides these test services to service, agency, and commercial vendor customers on a cost reimbursable basis.

## HFTF

The HFTF performs waveform conformance for: High Frequency (HF), HF ALE, FHF Email, HF Modem, and HF Anti-Jam.

The HFTF is configured as a classic HF radio facility with transmitter and receiver sites that are separated spatially. Linked by fiber optic cable and microwave radio systems, these two remote sites house the facility's six receive and six transmit antennas and support components. The receiver and transmitter sites are located approximately one mile and 30 miles, respectively, from the HF control facility.

## TEST CAPABILITIES

The JITC has developed test procedures to validate the following Military Standard (MIL-STD) and NATO STANAG requirements:

- MIL-STD-188-110B, Interoperability and Performance Standards for Data Modems
- MIL-STD-188-141B, Interoperability and Performance Standards for Medium and HF Radio Systems
- STANAG 4203, Annexes B and C, Technical Standards for Single Channel HF Radio
- STANAG 5066, Profile for HF Radio Data Communications
- STANAG 4529 and 4285, Characteristics of Single Tone Modulators/Demodulators HF Radios
- STANAG 5511, Annex B (para 7.1 and 7.2), Tactical Data Exchange Link 11/Link 11B
- MIL-STD-188-203-1A, Interoperability and Performance Standards for Tactical Digital Information Link-A
- STANAG 4539, Technical Standards for Non-Hopping HF Communications
- (S) MIL-STD-188-148A, IOP Standard for Anti-Jam Communications, HF (U)

## UHF SATCOM TEST FACILITY

The Demand Assigned Multiple Access (DAMA) Test Facility tests UHF SATCOM terminals for conformance to the following UHF SATCOM MIL-STDs.

- MIL-STD-188-181/A/B, Interoperability Standard for Dedicated 5-kHz and 25-kHz UHF Satellite Communications Channels
- MIL-STD-188-182/A, Interoperability Standard for 5-kHz UHF DAMA Terminal Waveform
- MIL-STD-188-183/A, Interoperability Standard for 25-kHz UHF TDMA/DAMA Terminal Waveform

Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6251.01A mandates that all users of UHF military satellite communications must have UHF SATCOM terminals that meet all the requirements of each UHF SATCOM MIL-STD. Once testing has demonstrated a terminal complies with CJCSI 6251.01A, JITC then issues a separate document referred to as a "Fourth Letter Certification".

Terminals will not be issued a Terminal Base Address by the address controlling authority until the terminals have received the Fourth Letter Certification. We can tailor testing support to meet customer requirements. The scope of testing can range from "Quick Look" verifications of specific MIL-STD requirements to assist equipment vendors with their developmental testing process, to full compliance testing of any or all of the MIL-STDs.

## UHF/VHF TEST FACILITY

The UHF/VHF test facility has a Local Area Network (LAN)-based test capability to perform simultaneous, manual and automated Radio Frequency (RF) parametric testing on multiple radios. The facility is equipped with state of the art portable and fixed test equipment that allows it to perform all standard radio frequency measurements. Waveforms that can/will be tested for conformance to standards within the facility include:

| | |
|---|---|
| SINCGARS | Have Quick II |
| EPLRS | WNW |
| VHF AM/FM | UHF AM/FM PSK LOS |
| LINK 16 | VHF ATC DATALINK |
| SRW | JAN-TE |
| APCO-25 | SATURN |
| SATURN | MUOS |
| Link 11/11B | DWTS |